Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-43. (Canceled)

44. (Original) A brachytherapy implant seed comprising:

a sealed inorganic metallic cylinder having a radioactive core received therein, the radioactive core comprising:

an inorganic amorphous silicate glass tube having an exterior surface extending axially along the tube; and

an inorganic crystalline ceramic coating received on at least a portion of the inorganic amorphous glass tube exterior surface, said coating comprising a therapeutic dose of radioactive material; and a radiographic marker received within the sealed inorganic metallic cylinder.

- 45. (Original) The brachytherapy implant seed of claim 44 wherein the glass comprises borosilicate.
- 46. (Original) The brachytherapy implant seed of claim 44 wherein the glass comprises phosphosilicate.
- 47. (Original) The brachytherapy implant seed of claim 44 wherein the inorganic crystalline ceramic comprises a metal silicate.
- 48. (Original) The brachytherapy implant seed of claim 47 wherein the inorganic crystalline ceramic comprises an aluminosilicate.

- 49. (Original) The brachytherapy implant seed of claim 44 wherein the therapeutic dose of radioactive material coats all of the tube exterior surface.
- 50. (Original) The brachytherapy implant seed of claim 44 wherein the therapeutic dose of radioactive material coats less than all of the tube exterior surface.
- 51. (Currently Amended) The <u>brachytherapy implant seed method</u>-of claim 50 wherein the therapeutic dose of radioactive material does not coat from 1.0 mm to 4.0 mm of a longitudinal central portion of the tube.
- 52. (Original) The brachytherapy implant seed of claim 44 wherein the inorganic crystalline ceramic coating has a thickness of from 0.1 mm. to 0.4 mm.
- 53. (Currently Amended) The brachytherapy implant seed of claim 44 wherein the inorganic crystalline ceramic coating has a thickness which is <u>substantially</u> the same as that of the inorganic amorphous silicate glass tube.
- 54. (Original) The brachytherapy implant seed of claim 44 wherein the inorganic crystalline ceramic coating has a thickness which is greater than that of the inorganic amorphous silicate glass tube.
- 55. (Original) The brachytherapy implant seed of claim 44 wherein the inorganic crystalline ceramic coating has a thickness which is less than that of the inorganic amorphous silicate glass tube.
- 56. (Original) The brachytherapy implant seed of claim 44 wherein the inorganic amorphous silicate glass tube comprises longitudinally opposing ends which are sealed by inorganic amorphous silicate glass.

4

- 57. (Original) The brachytherapy implant seed of claim 44 wherein the radiographic marker is received within the inorganic amorphous silicate glass tube.
- 58. (Original) The brachytherapy implant seed of claim 44 comprising a pair of balls received within longitudinal ends of the sealed inorganic metallic cylinder.
- 59. (Original) The brachytherapy implant seed of claim 58 wherein the balls comprise radiographic marker material.
- 60. (Original) The brachytherapy implant seed of claim 58 wherein the balls comprise a therapeutic dose of radioactive material.
- 61. (Original) The brachytherapy implant seed of claim 58 wherein the balls comprise an inorganic crystalline ceramic coated with a therapeutic dose of radioactive material.

62.-123. (Canceled)

124. (New) A brachytherapy implant seed comprising:

a sealed inorganic metallic cylinder;

a tubular core received within the sealed inorganic metallic cylinder and having an inner layer and a outer layer, the inner layer comprising an inorganic amorphous silicate glass tube having an exterior surface extending along a length of the glass tube, and the outer layer comprising an inorganic crystalline ceramic received on at least a portion of the exterior surface of the inner layer;

a therapeutic dose of radioactive material applied to at least a portion of the outer layer of the tubular core; and

a radiographic marker received within the sealed inorganic metallic cylinder.

- 125. (New) The brachytherapy implant seed of claim 124 wherein the outer layer of the tubular core is received on an entire length of the exterior surface of the inner layer of the tubular core.
- 126. (New) The brachytherapy implant seed of claim 124 wherein the outer layer of the tubular core is received on less than the entire length of the exterior surface of the first layer of the tubular core.
- 127. (New) The brachytherapy implant seed of claim 124 wherein the therapeutic dose of radioactive material is applied to an entire outer surface of the outer layer of the tubular core.
- 128. (New) The brachytherapy implant seed of claim 124 wherein the therapeutic dose of radioactive material is applied to less than the entire outer surface of the outer layer of the tubular core.
- 129. (New) The brachytherapy implant seed of claim 128 wherein the therapeutic dose of radioactive material is not applied to a 1.0 mm to 4.0 mm longitudinal central portion of the outer surface of the outer layer of the tubular core.
- 130. (New) The brachytherapy implant seed of claim 124 wherein the outer layer of the tubular core has a thickness of from 0.1 mm. to 0.4 mm.
- 131. (New) The brachytherapy implant seed of claim 124 wherein the outer layer of the tubular core has a thickness which is substantially the same as that of the inner layer of the tubular core.

6

Application No. 10/712,820 Reply to Office Action dated September 7, 2007

132. (New) The brachytherapy implant seed of claim 124 wherein the outer layer of the tubular core has a thickness which is greater than that of the inner layer of the tubular core.

133. (New) The brachytherapy implant seed of claim 124 wherein the outer layer of the tubular core has a thickness which is less than that of the inner layer of the tubular core.